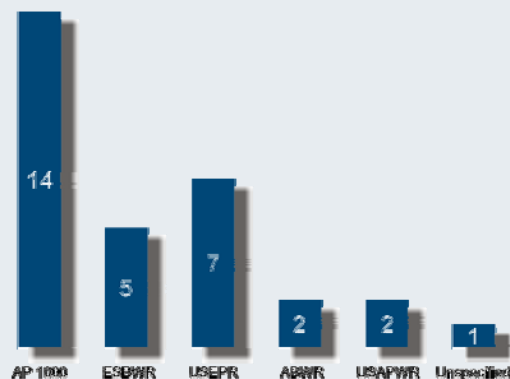


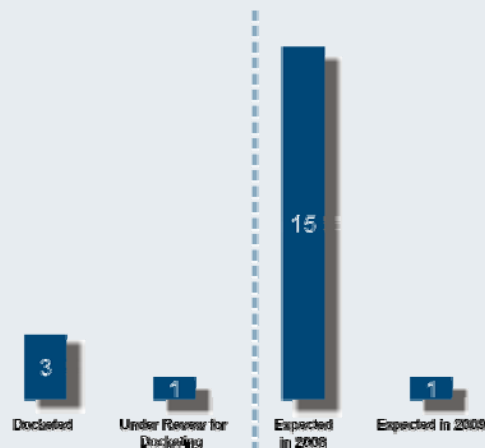
## Quick Statistics

|                                  |    |
|----------------------------------|----|
| Early Site Permits issued        | 3  |
| Permits under review             | 1  |
| Total COL applications submitted | 4  |
| Certified reactor designs        | 2  |
| Reactor designs under review     | 4  |
| Expected license applications    | 20 |
| Expected number of reactors      | 31 |
| Nuclear plant locations          | 19 |
| Companies applying for COL       | 17 |

## Number of Planned Reactors (31)



## Status of License Applications (20)



## Announced Nuclear Locations

- Bellefonte (AL)—Tennessee Valley Authority
- Bruneau (ID)—Alternate Holding Energy
- Callaway (MO)—AmerenUE
- Calvert Cliffs (MD)—UniStar
- Clinton (IL)—Exelon
- Comanche Peak (TX)—Luminant (formerly TXU)
- Fermi (MI)—DTE Energy
- Grand Gulf (MS)—Entergy
- Harris (NC)—Progress Energy
- Levy County (FL)—Progress Energy
- Nine Mile Point (NY)—UniStar
- North Anna (VA)—Dominion Energy
- River Bend (LA)—Entergy
- South Texas (TX)—STP Nuclear
- Summer (SC)—SCE&G
- Susquehanna (PA)—PPL
- Turkey Point (FL)—Florida Power & Light
- Vogtle (GA)—Southern Nuclear
- William Lee (SC)—Duke Energy

## Vendor Technology Under Consideration

### General Electric

- Advanced Boiling Water Reactor (ABWR), 1,356 MWe (*certified 10CFR52 App A*)
- Economic Simplified Boiling Water Reactor (ESBWR), 1,560 MWe

### Westinghouse

- Advanced Passive Pressurized Water Reactor (AP1000), Twin units 1,117 MWe each (*certified 10CFR52 App D*)

### AREVA

- United States Evolutionary Pressurized Water Reactor (US EPR), 1,600 MWe

### Mitsubishi Heavy Industry

- United States Advanced Pressurized Water Reactor (US APWR), 1,700 MWe



U.S. Department of Energy  
Office of Nuclear Energy

# Nuclear Power Deployment Scorecard

## Powering Future Decades



U.S. Department of Energy  
Office of Nuclear Energy

February 8, 2008

Updates available at  
<http://www.nuclear.gov>

## What's New

On February 8, 2008, NRC noticed a future hearing to allow the public an opportunity to intervene in the Bellefonte COLA.

The U.S. Air Force is holding an Energy Forum on March 3, 2008 to explore hosting a nuclear plant at a USAF installation (<http://usafenergyforum.com>).

On February 4<sup>th</sup>, NRC announced a public meeting for the Grand Gulf COL to be held on Feb. 21, 2008.

NRC docketed the environmental portion of UniStar's COLA for Calvert Cliffs Jan. 31<sup>st</sup>

Transition Power Development notified the NRC January 30<sup>th</sup> that it intends to submit a COL and/or ESP for the Blue Castle Generation Project in Utah by April 2010.

NRC docketed the Dominion COL application for review on January 25<sup>th</sup>.

NRC docketed an amendment to the Westinghouse AP1000 Design Certification on January 18<sup>th</sup>

The Loan Guarantee Rule was revised January 18<sup>th</sup> to correct publication errors.

MidAmerican ended its pursuit of a COL for a plant in Idaho on January 15<sup>th</sup>.

See most recent Scorecard updates at <http://www.nuclear.gov/>

## Legend



Implementation proceeding according to plan and schedule



Progress being made; however, issues or uncertainties exist that could impede progress



Unlikely to realize objectives absent significant management attention



No dates or end state established



Indicates change in status or progress since last evaluation



Regulatory Demonstration completed. No further government assistance is warranted.

## Nuclear Power Deployment Scorecard



### Early Site Permit (ESP)

- Three site permits issued by NRC (*Clinton, Grand Gulf, North Anna*)
- One site permit application under NRC review (*Vogtle*)
- Submission of three other ESP applications expected in 2010-2012



### Combined Construction and Operating License (COL)



#### License Applications Submitted to NRC

- Three COL applications docketed for review by NRC (*STP, Bellefonte, and North Anna*)
- One partial COLA docketed—environmental portion only (*Calvert Cliffs*)
- One COL application submitted to NRC (*William Lee*)
- Submission of 16 additional COLs expected in 2008-2009



#### Licenses to Build Issued by NRC

- NRC anticipates issuing COL 42 months after docketing



### Reactor Design Certification (DC)

- Two advanced reactor designs certified by NRC (*ABWR and AP 1000*)
- Two reactor designs undergoing NRC certification review (*ESBWR and AP1000 amendment*)
- Two DC applications submitted to NRC, but not yet docketed (*US-APWR and US- EPR*)



### New Nuclear Plant Orders



#### Long-Lead Equipment Orders

- Six utilities have ordered large long-lead nuclear component forgings with three reactor vendors
- No other long-lead equipment (e.g., heat exchanger and generator) have been ordered to date
- Japan Steel Works is only manufacturer of ultra-large forgings worldwide-capacity limited



#### Engineering, Procurement and Construction Contracts (EPC)

- No plant contracts signed to date; negotiations on-going among vendors and several utilities
- Plant engineering in progress; completion required to start construction



### New Nuclear Plant Construction, Operation & Deferral

- No utility has committed to constructing a new plant



### Federal Financial Incentives



#### Standby Support (Risk Insurance)

- Final 10 CFR Part 950 Rule issued August 11, 2006
- Standard Conditional Agreement issued September 2007
- DOE released on-line instructions to request a Conditional Agreement in December 2007



#### Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006
- Publish regulation for Production Tax Credit in FY08



#### Energy Facility Loan Guarantee

- Final 10 CFR Part 609 Rule amended January 18, 2008
- Solicitation for small scale loan guarantees closed December 2006
- No solicitation issued for nuclear plant loan guarantees
- \$18.5 billion approved for loan guarantees for nuclear plants December 2007